

**THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2018-257-WS**

IN RE: Application of Kiawah Island Utility, )	<b>DIRECT TESTIMONY</b>
Inc. for Adjustment of Rates and )	
Charges and Modifications to Certain )	<b>OF</b>
Terms and Conditions for the Provision )	
of Water and Sewer Service )	<b>BECKY DENNIS</b>

1    **Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.    My name is Becky Dennis. My business address is 31 Sora Rail Road, Kiawah Island,  
3    South Carolina.

4    **Q.    WHAT IS YOUR CURRENT POSITION?**

5    A.    I am employed by Kiawah Island Utility, Inc. ("KIU") as the Director of Operations. I  
6    began working here as an Operator Trainee/Clerk in 1978, then became General  
7    Manager in 1993. In March of 2016 my title changed to Director of Operations when  
8    SouthWest Water Company ("SouthWest") purchased the stock of KIU's holding  
9    company. My duties include complete oversight of all water and wastewater operations,  
10    regulatory compliance, customer service, budgetary monitoring and approval, repairs  
11    and maintenance, capital projects, and support for all services provided by KIU.

12   **Q.    PLEASE   STATE   YOUR   EDUCATIONAL   AND   PROFESSIONAL**  
13   **BACKGROUND.**

14   A.    My work experience in the water and wastewater industry began with Charleston Water  
15   Systems in 1977. I was among the first female operators at the Plum Island wastewater  
16   treatment facility, working as a Vacuum Filter Operator. I've always worn many hats

1 at KIU. Hired as a clerk/operator trainee, my tasks involved not only office and  
2 laboratory duties, but customer service, meter installations and repairs and operating a  
3 sand filter water treatment facility. When I was hired in 1978, KIU operated a .500  
4 MGD aerated lagoon wastewater treatment facility, which is currently rated at 1.7  
5 MGD. I have been able to expand my experiences in water and wastewater, customer  
6 services, business management, and many other areas too numerous to list. Growing  
7 with a company and working each task of providing quality service and adequate  
8 supply to our ever-growing customer base has been a personal responsibility I cherish.  
9 I am licensed by the South Carolina Department of Labor, Licensing, and Regulation  
10 as an "A" Level Operator in Water Treatment, Water Distribution, Biological  
11 Wastewater Treatment, and hold an "A" level Wastewater Collection Certification. At  
12 this time the Collection System licensing is considered voluntary. I have an Associate's  
13 Degree in Business Management obtained from Ashworth College.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

15 A. My testimony describes the nature of the operations of KIU and discusses the  
16 outstanding level of customer service provided to its customers.

17 **Q. WHAT IS KIU'S SERVICE AREA?**

18 A. KIU serves residential and commercial water and sewer customers on Kiawah Island,  
19 which is located across the Kiawah River from the rest of John's Island. Our service  
20 territory is coterminous with Kiawah Island Resort and the Town of Kiawah Island.

21 **Q. WHERE ARE KIU'S OFFICES AND WASTEWATER TREATMENT PLANT**  
22 **LOCATED?**

1     **A.**     KIU's office and its wastewater treatment plant are both centrally located at 31 Sora  
 2     Rail Road, inside the resort. We have other facilities, such as pump stations throughout  
 3     the resort. A map showing KIU's service territory is provided below as Exhibit BD-1.



4  
 5                     Ex. BD-1 – Map of Service Territory

6     **Q.     DOES KIU'S LOCATION PRESENT CHALLENGES?**

7     **A.**     Yes, it does. Our water, which is purchased from the St. John's Water Company, must  
 8     be pumped through two separate lines that run under the Kiawah River. The most  
 9     recent one was completed in 2017 at a total cost of \$10,021,636.62. This second line  
 10    ensures that our customers have a safe and reliable supply of water even during high  
 11    demand summer months.

12               Operating in a high-end resort also means that our facilities must be functional  
 13    and attractive. We take great pains with the appearance of our equipment, and we must  
 14    safeguard Kiawah's natural habitat. A photograph of our office on Sora Rail Road is  
 15    shown below as Exhibit BD-2.



Exhibit BD-2 - Office and Pump Station

**Q. PLEASE PROVIDE AN OVERVIEW OF KIU'S WATER SYSTEM AND CUSTOMERS.**

A. On December 31, 2017, KIU served 4,181 water customers. Most of these are residential customers. KIU services its water customers through approximately 70 miles of water pipelines on Kiawah Island. It pumped 888 million gallons of potable water to its customers in 2017 with an average daily flow of 2.433 MGD. The peak day demand was 4.380 million gallons, which occurred on May 12, 2017. To ensure the customer's demands are met, KIU maintains two water pumping facilities, two Aquifer Storage and Recovery systems for peak shaving and emergency conditions, and 4.5 MG of ground storage. A picture of our Governors Road pump station is included as Exhibit BD-3. The water system is operated under South Carolina Department of Health and Environmental Control ("DHEC") Permit No. 1010008.



Ex. BD-3 - Governors Dr. Water Pump Station

**Q. PLEASE PROVIDE AN OVERVIEW OF KIU'S WASTEWATER SYSTEM AND CUSTOMERS.**

**A.** As of the end of the 2017 test year, KIU served 3,461 sewer customers. Most of these are residential customers. KIU's sewer system is comprised of a wastewater treatment facility, 52 sewage-pumping stations, and gravity collection mains, force mains, and treated effluent transfer mains, aggregating approximately 71 miles. The wastewater treatment facility is located at the central plant at 31 Sora Rail Road; photographs are included below as Exhibits BD-4 and BD-5.



Ex. BD-4 - Wastewater Treatment Cell # 1

Ex. BD-5 - Treated Effluent Storage Cell

During the 2017 test year, the average daily flow was 0.475 MGD with a maximum flow day of 1.567 MGD, which occurred on August 9, 2017. Besides the 269.2 MG of combined effluent and well water, KIU added 33 MG of potable water to meet the golf course demands in the test year. The capacity of KIU's wastewater facility is rated at 1.7 MGD and operates under South Carolina DHEC Permit #ND0017361.

**Q. PLEASE DESCRIBE ANY IMPROVEMENTS AND MAINTENANCE MADE TO KIU'S SYSTEM SINCE THE LAST RATE CASE.**

A. In addition to regular maintenance, we painted our water tanks in 2018 at the cost of \$103,861. The tanks had last been painted in 2006, so this necessary upkeep was due.

A picture of the newly painted tanks is included below as Ex. BD-6.



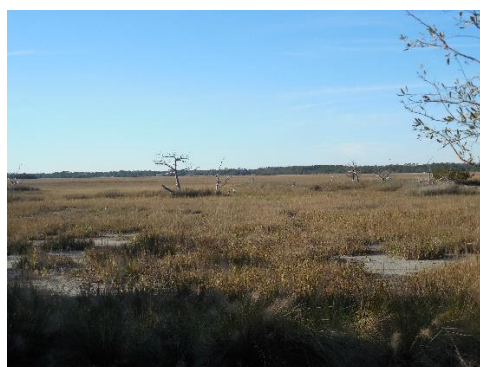
### Ex. BD-6 - Water Storage Tanks

KIU has also finished restoring the construction site for the water line installed in 2016.

The island's natural habitat is of paramount importance to its residents, and KIU was committed to completing the project as unobtrusively as possible. Included as Exhibits



BD-7 and BD-8 are before and after pictures showing how the natural vegetation of the site has been restored.



Ex. BD-7 - Construction Site for Second Water Line

Ex. BD-8 - Restored Construction Site

**Q. PLEASE PROVIDE AN OVERVIEW OF KIU'S CUSTOMER SERVICE OPERATIONS.**

A. KIU has a staff of 15, with 11 staff working in maintenance and four staff primarily providing office support. Every staff member is focused on providing quality service to customers, whether by making repairs in a timely manner or politely addressing a customer's concern. KIU employees are enthusiastic about going above and beyond routine customer service.

KIU has a duty operator on the island 24 hours a day, seven days a week, which allows for prompt responses in the event of afterhours and weekend emergencies. KIU staff understands that the majority of KIU customers do not reside on the island full-time and therefore work diligently to be a valuable resource for the customers during their absences. KIU consistently provides reliable, personalized customer service.

1   **Q.   HAVE ANY OF KIU’S CUSTOMERS COMPLAINED ABOUT THE**  
2   **COMPANY TO THE ORS SINCE THE LAST RATE CASE?**

3   A.   We had one customer complaint related to high usage at her residence. We tested the  
4   meter, made an adjustment to the lowest rate of the tier, and set up a payment plan for  
5   her. A second complaint was made by the St. Johns Fire Department (“SJFD”) related  
6   to the hydrant fee it is charged. The complaint was consolidated with the current rate  
7   case and is addressed later in my testimony.

8   **Q.   OTHER THAN THE COMPLAINTS TO THE ORS, HAS THE COMPANY**  
9   **HAD ANY COMPLAINTS SINCE THE LAST RATE CASE? IF SO, HOW**  
10   **WERE THEY RESOLVED?**

11   A.   Occasionally we have a customer complain about the minimum fee when they have not  
12   occupied the property for a period of time. Other complaints relate to online billing  
13   functions. Customer complaints are typically addressed quickly with expert guidance  
14   from our customer service staff. All complaints are handled promptly and consistent  
15   with all regulatory rules. KIU staff always go the extra mile to ensure the complaint  
16   has been handled with thoughtfulness and tact.

17           Our most frequent service requests involve high water meter readings. Kiawah  
18   Island has a warm climate, and many of our customers have substantial irrigation needs,  
19   but our customers can nevertheless be surprised by their water bills. Additionally, since  
20   many of our customers are non-residents and are not aware of the automatic settings  
21   their landscapers have programmed on their controllers. What this means is that



1 whether the owners are on the property or not the irrigation water is being used  
2 according to the automatic settings established by their landscape provider.

3 **Q. HOW DOES KIU ADDRESS HIGH WATER USAGE BY A CUSTOMER?**

4 A. There are three primary ways KIU offers help to customers experiencing higher usage  
5 than expected. First, we try to be preemptive regarding high meter readings. If monthly  
6 meter readings indicate usage beyond the normal range, the meter reading is confirmed  
7 by a second reader. If the meter showing abnormally high usage is still running, the  
8 meter reader immediately tries to determine if there is anything visible on the property  
9 such as leaking irrigation, a broken water line, or a hose bib left open that may be  
10 contributing to the high usage. If they find a hose bib running or faulty irrigation head  
11 at the time of reading the meter, they will turn off the spigot or backflow device feeding  
12 the irrigation system. They will document their actions to assist the customer service  
13 representatives in relaying what was found and corrective action to the owner or their  
14 representative. If nothing is visible on the outside of the home, the customer service  
15 rep will send a third staff member to verify the reading and observe if there has been  
16 additional activity on the meter. They will follow up by contacting the homeowner or  
17 property manager to inform them of the high reading.

18 Over the years, KIU has documented some of the reasons for excessive usage,  
19 including the following: faulty toilet components, broken irrigation heads, water left  
20 running on outside hoses, stuck pool fill valves, faulty fill valves on outside fountains,  
21 and irrigation timers defaulting to settings that increase irrigation schedules. Because  
22 our operators do not know specifically what apparatuses a customer may have that are

1 water dependent (HVAC systems, water heaters, swimming pools, etc.), KIU generally  
2 will not shut a meter off due to high usage without permission from the customer. By  
3 obtaining customer approval before shutting off a meter with high usage, KIU reduces  
4 potential damage to a customer's property.

5 The second way KIU assists customers with their high usage situations is by  
6 offering to conduct irrigation tests on their systems free of charge to determine how  
7 much water is being used during an irrigation cycle. Many times, this irrigation test  
8 involves coordination with the owner's landscaper to access the irrigation controller.  
9 KIU staff, along with the owner or their representative, will determine the watering  
10 schedule set at that specific time. They will run through each zone to determine the  
11 gallons per minute and plug in the actual time set on the controller for that zone. They  
12 go through the entire schedule and produce a spreadsheet showing the gallons used for  
13 irrigation at the time of the test. A copy of a sample KIU field report is provided as  
14 Exhibit BD-9. KIU staff spend considerable time encouraging customers to become  
15 more involved in the operation of their irrigation systems and to perform periodic  
16 testing themselves to ensure that control settings align with watering needs.

17 The third way KIU helps customers with high usage is with meter tests. If a  
18 customer requests to have a meter tested, KIU will do one of three things. First,  
19 operators may field test the meter in place against a new meter of the same size.  
20 Second, they may remove the meter and test it on our meter test bench at the main  
21 facility. Third, they may switch out the meter and send the pulled meter to an  
22 independent testing facility. Once the results are received, a copy is provided to the

1 customer. In my nearly 41 years at KIU, I have never received a test report that  
2 indicated the meter over-registered water usage.

3 **Q. IS KIU REQUESTING A CHANGE TO ITS HYDRANT FEES?**

4 A. KIU is seeking a change in the fixed hydrant fee for fire-fighting services provided by  
5 the SJFD.

6 **Q. PLEASE DESCRIBE KIU'S PROPOSED REDUCTION TO HYDRANT FEES.**

7 A. KIU's hydrant fee has been included in its tariffs for over 30 years and was approved  
8 in KIU's last general rate case by Order No. 2017-277(A). This fee is used to ensure  
9 the hydrants on Kiawah are maintained and available for SJFD training and for fire-  
10 fighting services to KIU's customers. The fee covers repair, replacement, and  
11 maintenance of hydrants. Additional costs for system enhancements and maintenance  
12 of components to ensure delivery of flow and pressure if a fire occurs were not  
13 considered in this fee, although they are vital to the SJFD's ability to provide fire-  
14 fighting services. In 2018, the SJFD requested that KIU cease charging this fee and  
15 intervened in the current rate case. In its application, KIU has requested a decrease of  
16 the hydrant fee from \$134.79 to \$110.00 per hydrant per year. The requested fee  
17 amount is based on a new cost study performed by KIU to support the rate. A  
18 breakdown of KIU's cost for maintaining hydrants is attached as Exhibit BD-10.

1   **Q.    HOW MUCH REVENUE WILL BE GENERATED BY THE HYDRANT**  
2   **CHARGE?**

3   A.    The hydrant charges will raise approximately \$54,670 per year. If the Commission  
4        decides to eliminate the hydrant fee, as advocated by the SJFD, KIU requests it be  
5        allowed to recover this lost revenue through rates charged to its customers.

6   **Q.    HOW WOULD RATES BE AFFECTED IF THE HYDRANT FEE IS**  
7   **ELIMINATED?**

8   A.    The impact on the average KIU residential water and sewer customer would be about  
9        \$.74 per month.

10   **Q:   HAS KIAWAH ISLAND UTILITY BEEN NOTIFIED OF ANY INCREASE TO**  
11   **WATER COSTS THAT IS NOT INCLUDED IN THIS RATE CASE?**

12   A.    Yes, we received notification from our potable water supplier, St Johns Water  
13        Company, Inc., that our water will increase by \$0.11 cost per 1,000 gallons beginning  
14        on March 1, 2019. The notification letter was received subsequent to this rate filing on  
15        November 21, 2018.

16   **Q.    HOW DOES THE UTILITY INTEND TO IMPLEMENT THE RECOVERY**  
17   **THIS COST INCREASE?**

18        Given the timing of this rate case and to avoid further complications with the expected  
19        PSC order, we intend to notify the PSC as required in the Purchased Water Adjustment  
20        provision of its tariff approved in Order No. 2017-277(A) and implement this increase  
21        beginning May 1, 2019. In do so, Kiawah understands that it is foregoing the recovery  
22        of this cost increase for two months.

1    **Q.     DOES THIS CONCLUDE YOUR TESTIMONY?**

2    A.     Yes, it does.

## **EXHIBIT BD-1**

Map of Service Territory



## **EXHIBIT BD-2**

Office and Pump Station



### **EXHIBIT BD-3**

Governors Dr. Water Pump Station



### **EXHIBIT BD-4**

Wastewater Treatment Cell # 1





**EXHIBIT BD-5**  
Treated Effluent Storage Cell



**EXHIBIT BD-6**  
Water Storage Tanks



## **EXHIBIT BD-7**

Construction Site for Second Water Line



## **EXHIBIT BD-8**

Restored Construction Site



## **EXHIBIT BD-9**

### Sample Irrigation Test Field Report

## Worksheet to calculate water usage for irrigation systems

Address XXXXXX

Date

Inspection done by:    Randy Roberts and Ed McCray w/KIU

Controller operated by:

# 1 Zone Number	Program	# 2 Run Time (Min) On controller		# 3 Gallons per minute (GPM)		# 4 Total Gallons per zone (per Cycle)		# 5 Number of days on per month		# 6 Total gallons per zone/per month
1	A	15	X	12	=	180	X	30	=	5,400
2	A	20	X	11	=	220	X	30	=	6,600
3	A	10	X	10	=	100	X	30		3,000
9	A	20	X	1	=	20	X	30		600
11	A	35	X	6	=	210	X	30	=	6,300
2	B	20	X	11	=	220	X	30	=	6,600
9	B	20	X	1	=	20	X	30	=	600
6	C	20	X	12	=	240	X	20	=	4,800
7	C	20	X	11	=	220	X	20	=	4,400
8	C	10	X	11	=	110	X	20	=	2,200
10	C	10	X	8	=	80	X	20	=	1,600
			X		=		X		=	-
				Total Gallons per cycle		1,620			Total Gallons/month	42,100

Test results today are based on today's settings and may not be reflective of settings during previous billing periods.

### Guide to columns above

- # 1      The zone number associated with irrigation controller
- # 2      The number of minutes set on the controller for each zone
- # 3      Gallons per minute per zone.    This number is obtained by running each zone while observing the meter.
- # 4      This is the calculation of #2, run time x # 3 the gallons per minute
- # 5      Calculated from the number of days set to run on the controller
- # 6      Calculated from # 4 (gallons per zone) x #5 (days per month)

## **EXHIBIT BD-10**

Hydrant Maintenance costs

**Kiawah Island Utility, Inc.****Fire Hydrant Charges**

The current fire hydrant charges of \$134.79 annually per hydrant is used to cover the cost of repair and maintenance to the 494 fire hydrants located on Kiawah Island.

We have been able to reduce our total costs per hydrant to \$110. The breakdown is as follows:

1	Trimming and weeding around hydrant			
	0.75 man-hours semi-annually	\$	24.41	
2	Paint and tape hydrant, lubricating fittings and caps			
	1 man-hours annually	\$	32.55	
3	Exercise hydrant valves			
	0.5 man-hours semi-annually	\$	16.28	
4	Materials to maintain each hydrant			
	Paint, reflective tape, lubricant, parts	\$	7.09	Avg of normal costs
5	Labor to Flush areas to clear water after SJFD training			
	0.75	\$	24.41	
	Sub Total of costs to maintain hydrants and clear lines	\$	104.75	\$ 104.75
6	Labor to repair hydrant*			
	2 men times 2 hours ea.	\$	130.21	
		Times 4	\$ 520.84	\$ 1.05
7	Labor to replace hydrant*			
	4 men times 8 hours each	\$	1,041.68	
		times 2	\$ 2,083.37	\$ 4.22
	Total cost to maintain hydrants		<u>\$ 3,985.60</u>	<u>\$ 110.02</u>

**\*Note: We typically have 2 replacement per year and between 3-4 repairs**